

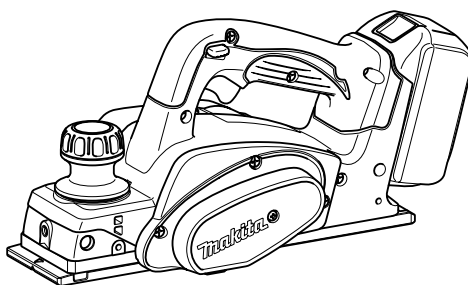
## INSTRUCTION MANUAL



# Cordless Planer

**BKP140**

**BKP180**



011751

**IMPORTANT:** Read Before Using.

ENGLISH (Original instructions)

SPECIFICATIONS

Model	BKP140	BKP180
Planing width	82 mm	
Planing depth	1.6 mm	2 mm
Shiplapping depth	9 mm	
No load speed (min <sup>-1</sup> )	13,000	14,000
Overall length	329 mm	333 mm
Net weight	3.3 kg	3.4 kg
Rated voltage	D.C. 14.4 V	D.C. 18 V

- Due to our continuing programme of research and development, the specifications herein are subject to change without notice.
- Specifications and battery cartridge may differ from country to country.
- Weight, with battery cartridge, according to EPTA-Procedure 01/2003

END004-4

Wear ear protection

Symbols

The following show the symbols used for the equipment. Be sure that you understand their meaning before use.



- Read instruction manual.
- Only for EU countries  
Do not dispose of electric equipment or battery pack together with household waste material!  
In observance of European Directive 2002/96/EC on waste electric and electronic equipment, 2006/66/EC on batteries and accumulators and waste batteries and accumulators and their implementation in accordance with national laws, electric equipment and battery pack that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

ENE001-1

Intended use

The tool is intended for planing wood.

ENG905-1

Noise

The typical A-weighted noise level determined according to EN60745:

Model BKP140

Sound pressure level (L<sub>pA</sub>) : 80 dB(A)  
Uncertainty (K) : 3 dB(A)

The noise level under working may exceed 80 dB (A).

Model BKP180

Sound pressure level (L<sub>pA</sub>) : 84 dB(A)  
Sound power level (L<sub>WA</sub>) : 95 dB(A)  
Uncertainty (K) : 3 dB(A)

ENG900-1

Vibration

The vibration total value (tri-axial vector sum) determined according to EN60745:

Model BKP140

Work mode : planing softwood  
Vibration emission (a<sub>v</sub>) : 3.5 m/s<sup>2</sup>  
Uncertainty (K) : 1.5 m/s<sup>2</sup>

Model BKP180

Work mode : planing softwood  
Vibration emission (a<sub>v</sub>) : 4.5 m/s<sup>2</sup>  
Uncertainty (K) : 1.5 m/s<sup>2</sup>

ENG901-1

- The declared vibration emission value has been measured in accordance with the standard test method and may be used for comparing one tool with another.
- The declared vibration emission value may also be used in a preliminary assessment of exposure.

⚠WARNING:

- The vibration emission during actual use of the power tool can differ from the declared emission value depending on the ways in which the tool is used.
- Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

## For European countries only

### EC Declaration of Conformity

We Makita Corporation as the responsible manufacturer declare that the following Makita machine(s):

Designation of Machine:

Cordless Planer

Model No./ Type: BKP140, BKP180

are of series production and

**Conforms to the following European Directives:**

2006/42/EC

And are manufactured in accordance with the following standards or standardised documents:

EN60745

The technical documentation is kept by our authorised representative in Europe who is:

Makita International Europe Ltd.

Michigan Drive, Tongwell,

Milton Keynes, Bucks MK15 8JD, England

30.08.2010



Tomoyasu Kato

Director

Makita Corporation

3-11-8, Sumiyoshi-cho,

Anjo, Aichi, 446-8502, JAPAN

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GEA006-2

## General Power Tool Safety Warnings

**⚠ WARNING Read all safety warnings and all instructions.** Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

### Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### Work area safety

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause

you to lose control.

#### Electrical safety

4. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
5. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
6. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
7. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
8. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
9. **If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of an GFCI reduces the risk of electric shock.

#### Personal safety

10. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
11. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
12. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
13. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
14. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
15. **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing, and gloves**

**away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.

16. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

#### **Power tool use and care**

17. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
18. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
19. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
20. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
21. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
22. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
23. **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

#### **Battery tool use and care**

24. **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
25. **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
26. **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery

terminals together may cause burns or a fire.

27. **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

#### **Service**

28. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
29. **Follow instruction for lubricating and changing accessories.**
30. **Keep handles dry, clean and free from oil and grease.**

GEB064-1

## **CORDLESS PLANER SAFETY WARNINGS**

1. **Wait for the cutter to stop before setting the tool down.** An exposed cutter may engage the surface leading to possible loss of control and serious injury.
2. **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
3. **Rags, cloth, cord, string and the like should never be left around the work area.**
4. **Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.**
5. **Use only sharp blades. Handle the blades very carefully.**
6. **Be sure the blade installation bolts are securely tightened before operation.**
7. **Hold the tool firmly with both hands.**
8. **Keep hands away from rotating parts.**
9. **Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade.**
10. **Make sure the blade is not contacting the workpiece before the switch is turned on.**
11. **Wait until the blade attains full speed before cutting.**
12. **Always switch off and wait for the blades to come to a complete stop before any adjusting.**
13. **Never stick your finger into the chip chute. Chute may jam when cutting damp wood. Clean out chips with a stick.**
14. **Do not leave the tool running. Operate the tool only when hand-held.**
15. **Always change both blades or covers on the drum, otherwise the resulting imbalance will**

cause vibration and shorten tool life.

16. Use only Makita blades specified in this manual.
17. Always use the correct dust mask/respirator for the material and application you are working with.

## SAVE THESE INSTRUCTIONS.

### WARNING:

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product.

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

ENC007-7

## IMPORTANT SAFETY INSTRUCTIONS

### FOR BATTERY CARTRIDGE

1. Before using battery cartridge, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
2. Do not disassemble battery cartridge.
3. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
4. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.
5. Do not short the battery cartridge:
  - (1) Do not touch the terminals with any conductive material.
  - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain.

A battery short can cause a large current flow, overheating, possible burns and even a breakdown.

6. Do not store the tool and battery cartridge in locations where the temperature may reach or exceed 50 ° C (122 ° F).
7. Do not incinerate the battery cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
8. Be careful not to drop or strike battery.
9. Do not use a damaged battery.

## SAVE THESE INSTRUCTIONS.

### Tips for maintaining maximum battery life

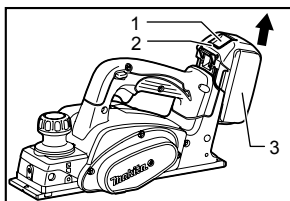
1. Charge the battery cartridge before completely discharged.  
Always stop tool operation and charge the battery cartridge when you notice less tool power.
2. Never recharge a fully charged battery cartridge.  
Overcharging shortens the battery service life.
3. Charge the battery cartridge with room temperature at 10 ° C - 40 ° C (50 ° F - 104 ° F). Let a hot battery cartridge cool down before charging it.
4. Charge the battery cartridge once in every six months if you do not use it for a long period of time.

## FUNCTIONAL DESCRIPTION

### CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

### Installing or removing battery cartridge

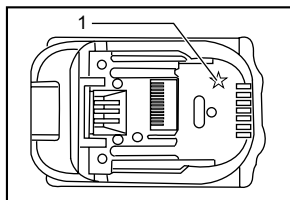


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1. Button
2. Red indicator
3. Battery cartridge

- Always switch off the tool before installing or removing of the battery cartridge.
- To remove the battery cartridge, slide it from the tool while sliding the button on the front of the cartridge.
- To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, it is not locked completely. Install it fully until the red indicator cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
- Do not use force when installing the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

### Battery protection system (Battery cartridge with a star mark)



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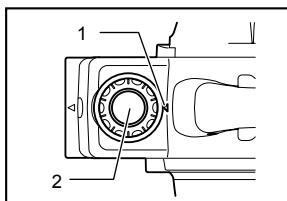
1. Star mark

The battery cartridge with a star mark is equipped with the protection system, which automatically cuts off the output power for its long service life.

The tool stops during operation when the tool and/or battery are placed under the following situation. This is caused by the activation of protection system and does not show the tool trouble.

- When the tool is overloaded:  
At this time, release the switch trigger, remove the battery cartridge and remove causes of overload and then pull the switch trigger again to restart.
- When battery cells get hot:  
If any operation of the switch trigger, the motor will remain stopped. At this time, stop use of the tool and cool or charge the battery cartridge after removing it from the tool.
- When the remaining battery capacity gets low:  
If any operation of the switch trigger, the motor will remain stopped. At this time, remove the battery cartridge from the tool and charge it.

### Adjusting depth of cut

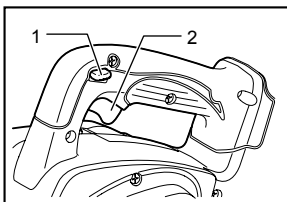


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1. Pointer
2. Knob

Depth of cut may be adjusted by simply turning the knob on the front of the tool so that the pointer points the desired depth of cut.

### Switch action



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1. Lock-off lever
2. Switch trigger

### CAUTION:

- Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.
- Do not pull the switch trigger hard without pressing the lock-off lever. This can cause switch breakage.

To prevent the switch trigger from being accidentally pulled, a lock-off lever is provided. To start the tool, slide the lock-off lever and pull the switch trigger. Release the switch trigger to stop.

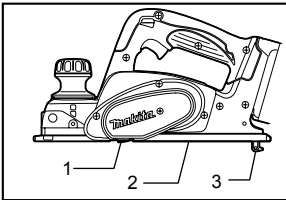
## ⚠ WARNING:

- For your safety, this tool is equipped with lock-off lever which prevents the tool from unintended starting. NEVER use the tool if it runs when you simply pull the switch trigger without pressing the lock-off lever. Return tool a MAKITA service center for proper repairs BEFORE further usage.
- NEVER tape down or defeat purpose and function of lock-off lever.

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided.

To start the tool, depress the lock-off button and pull the switch trigger. Release the switch trigger to stop.

## Foot



1. Planer blade
2. Rear base
3. Foot

011739

After a cutting operation, raise the back side of the tool and a foot comes under the level of the rear base. This prevents the tool blades to be damaged.

## ASSEMBLY

### ⚠ CAUTION:

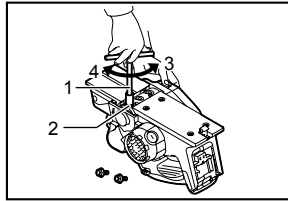
- Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

## Removing or installing planer blades

### ⚠ CAUTION:

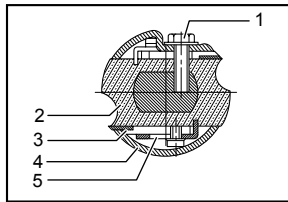
- Tighten the blade installation bolts carefully when attaching the blades to the tool. A loose installation bolt can be dangerous. Always check to see they are tightened securely.
- Handle the blades very carefully. Use gloves or rags to protect your fingers or hands when removing or installing the blades.
- Use only the Makita wrench provided to remove or install the blades. Failure to do so may result in overtightening or insufficient tightening of the installation bolts. This could cause an injury.

## For tool with conventional planer blades



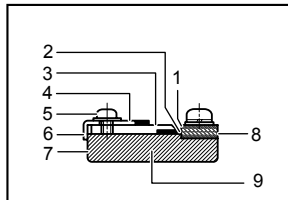
011740

1. Socket wrench
2. Bolt
3. Loosen
4. Tighten



002555

1. Bolt
2. Drum
3. Planer blade
4. Drum cover
5. Adjusting plate



002556

1. Inside edge of gauge plate
2. Blade edge
3. Planer blade
4. Adjusting plate
5. Screws
6. Heel
7. Back side of gauge base
8. Gauge plate
9. Gauge base

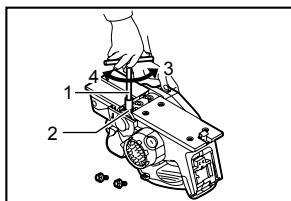
To remove the blades on the drum, unscrew the installation bolts with the socket wrench. The drum cover comes off together with the blades.

To install the blades, first clean out all chips or foreign matter adhering to the drum or blades. Use blades of the same dimensions and weight, or drum oscillation/vibration will result, causing poor planing action and, eventually, tool breakdown.

Place the blade on the gauge base so that the blade edge is perfectly flush with the inside edge of the gauge plate. Place the adjusting plate on the blade, then simply press in the heel of the adjusting plate flush with the back side of the gauge base and tighten two screws on the adjusting plate. Now slip the heel of the adjusting plate into the drum groove, then fit the drum cover on it. Tighten all the installation bolts evenly and alternately with the socket wrench.

Repeat the above procedures for the other blade.

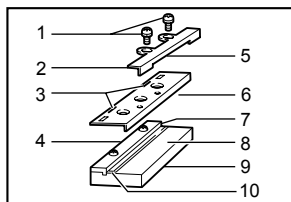
## For tool with mini planer blades



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1. Socket wrench
2. Bolt
3. Loosen
4. Tighten

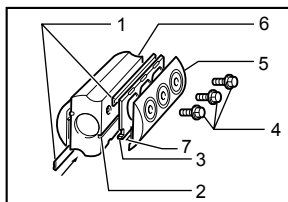
1. Remove the existing blade, if the tool has been in use, carefully clean the drum surfaces and the drum cover. To remove the blades on the drum, unscrew the three installation bolts with the socket wrench. The drum cover comes off together with the blades.



002565

2. To install the blades, loosely attach the adjusting plate to the set plate with the pan head screws and set the mini planer blade on the gauge base so that the cutting edge of the blade is perfectly flush with the inside flank of the gauge plate.
3. Set the adjusting plate/set plate on the gauge base so that the planer blade locating lugs on the set plate rest in the mini planer blade groove, then press in the heel of the adjusting plate flush with the back side of the gauge base and tighten the pan head screws.

4. It is important that the blade sits flush with the inside flank of the gauge plate, the planer blade locating lugs sit in the blade groove and the heel of the adjusting plate is flush with the back side of the gauge base. Check this alignment carefully to ensure uniform cutting.
5. Slip the heel of the adjusting plate into the groove of the drum.



002566

1. Mini planer blade
2. Groove
3. Set plate
4. Hex. flange head bolt
5. Drum cover
6. Drum
7. Adjusting plate

6. Set the drum cover over the adjusting plate/set plate and screw in the three hex flange head bolts so that a gap exists between the drum and the set plate to slide the mini planer blade into position. The blade will be positioned by the planer blade locating lugs on the set plate.
7. The blade's lengthwise adjustment will need to be manually positioned so that the blade ends are clear and equidistant from the housing on one side and the metal bracket on the other.
8. Tighten the three hex flange head bolts (with the socket wrench provided) and rotate the drum to check clearances between the blade ends and the tool body.
9. Check the three hex flange head bolts for final tightness.
10. Repeat procedures 1 - 9 for the other blade.

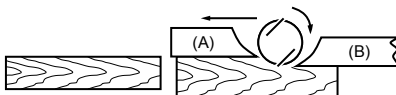
## For the correct planer blade setting

Your planing surface will end up rough and uneven, unless the blade is set properly and securely. The blade must be mounted so that the cutting edge is absolutely level, that is, parallel to the surface of the rear base. Refer to some examples below for proper and improper settings.



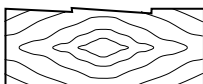
- (A) Front base (Movable shoe)  
(B) Rear base (Stationary shoe)

#### Correct setting



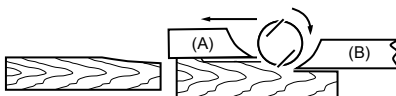
Although this side view cannot show it, the edges of the blades run perfectly parallel to the rear base surface.

#### Nicks in surface



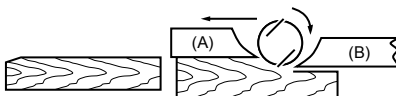
Cause: One or both blades fails to have edge parallel to rear base line.

#### Gouging at start



Cause: One or both blade edges fails to protrude enough in relation to rear base line.

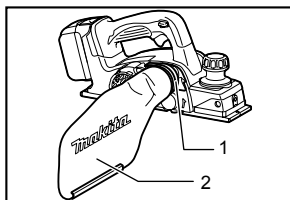
#### Gouging at end



Cause: One or both blade edges protrudes too far in relation to rear base line.

EN0004-1

### Dust bag (accessory)



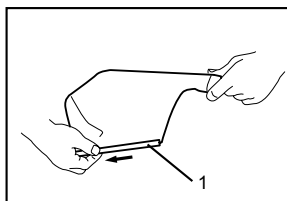
1. Nozzle  
2. Dust bag

#### For tool without nozzle

Remove the chip cover and install the nozzle (optional accessory). Attach the dust bag onto the nozzle. The nozzle is tapered. When attaching the dust bag, push it onto the nozzle firmly as far as it will go to prevent it from coming off during operation.

#### For tool with nozzle

Attach the dust bag onto the nozzle. The nozzle is tapered. When attaching the dust bag, push it onto the nozzle firmly as far as it will go to prevent it from coming off during operation.



1. Fastener

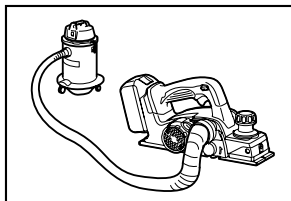
007802

When the dust bag is about half full, remove the dust bag from the tool and pull the fastener out. Empty the dust bag of its contents, tapping it lightly so as to remove particles adhering to the insides which might hamper further collection.

#### NOTE:

- If you connect a Makita vacuum cleaner to this tool, more efficient and cleaner operations can be performed.

## Connecting a vacuum cleaner



011757

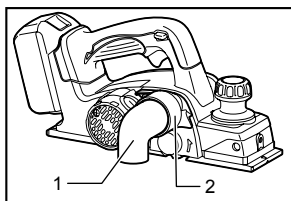
### For tool without nozzle

When you wish to perform clean planing operation, connect a Makita vacuum cleaner to your tool. Before connecting the vacuum cleaner, remove the chip cover from the tool. Then connect a hose of the vacuum cleaner to the nozzle (optional accessory) as shown in the figures.

### For tool with nozzle

When you wish to perform clean planing operation, connect a Makita vacuum cleaner to your tool. Then connect a hose of the vacuum cleaner to the nozzle as shown in the figures.

### Elbow (optional accessory)



011758

Use of elbow allows change of chip discharge direction to perform cleaner work.

### For tool without nozzle

Remove the chip cover and install the nozzle (optional accessory). Attach the elbow (optional accessory) on the nozzle of the tool by just slipping on it. To remove it, just pull it out.

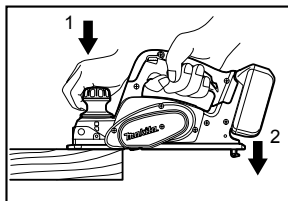
### For tool with nozzle

Attach the elbow (optional accessory) on the nozzle of the tool by just slipping on it. To remove it, just pull it out.

## OPERATION

Hold the tool firmly with one hand on the knob and the other hand on the switch handle when performing the tool.

### Planing operation



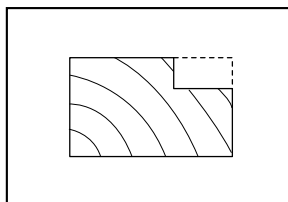
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1. Start
2. End

First, rest the tool front base flat upon the workpiece surface without the blades making any contact. Switch on and wait until the blades attain full speed. Then move the tool gently forward. Apply pressure on the front of tool at the start of planing, and at the back at the end of planing. Planing will be easier if you incline the workpiece in stationary fashion, so that you can plane somewhat downhill.

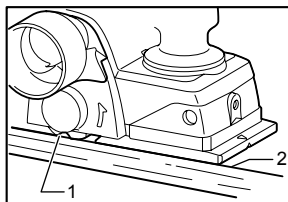
The speed and depth of cut determine the kind of finish. The power planer keeps cutting at a speed that will not result in jamming by chips. For rough cutting, the depth of cut can be increased, while for a good finish you should reduce the depth of cut and advance the tool more slowly.

### Shiplapping (Rabbeting)



002580

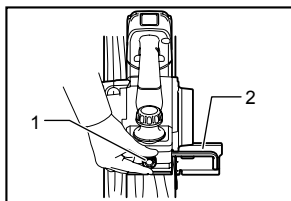
To make a stepped cut as shown in the figure, use the edge fence (guide rule) which is obtained as accessory.



011752

1. Blade edge
2. Cutting line

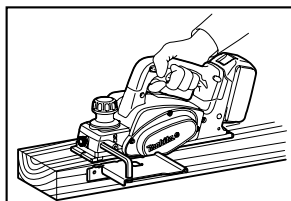
Draw a cutting line on the workpiece. Insert the edge fence into the hole in the front of the tool. Align the blade edge with the cutting line.



1. Screw
2. Edge fence (optional accessory)

011760

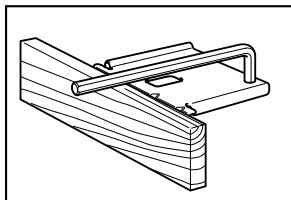
Adjust the edge fence until it comes in contact with the side of the workpiece, then secure it by tightening the screw.



011761

When planing, move the tool with the edge fence flush with the side of the workpiece. Otherwise uneven planing may result.

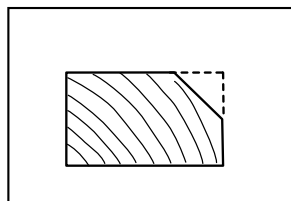
Maximum shiplapping (rabbeting) depth is 9 mm.



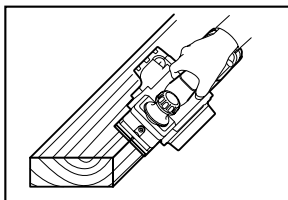
010183

You may wish to add to the length of the fence by attaching an extra piece of wood. Convenient holes are provided in the fence for this purpose, and also for attaching an extension guide (optional accessory).

## Chamfering



003634



011748

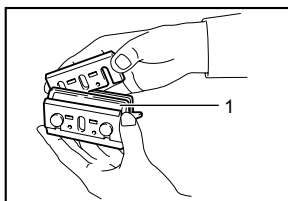
To make a chamfering cut as shown in the figure, align the "V" groove in the front base with the edge of the workpiece and plane it.

## MAINTENANCE

### ⚠CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.
- Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

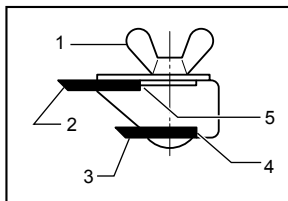
### Sharpening the planer blades For conventional blades only



1. Sharpening holder

002588

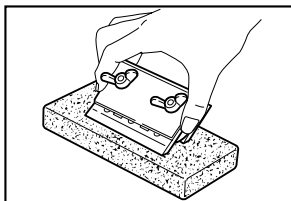
Always keep your blades sharp for the best performance possible. Use the sharpening holder (optional accessory) to remove nicks and produce a fine edge.



1. Wing nut
2. Blade (A)
3. Blade (B)
4. Side (D)
5. Side (C)

002589

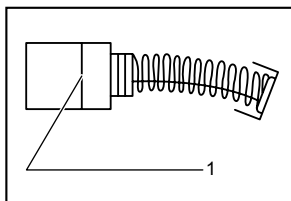
First, loosen the two wing nuts on the holder and insert the blades (A) and (B), so that they contact the sides (C) and (D). Then tighten the wing nuts.



002590

Immerse the dressing stone in water for 2 or 3 minutes before sharpening. Hold the holder so that the both blades contact the dressing stone for simultaneous sharpening at the same angle.

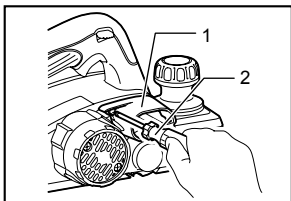
### Replacing carbon brushes



001145

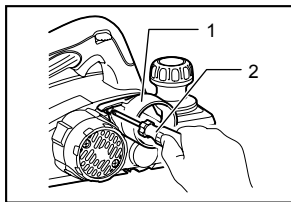
Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.

1. Limit mark



011749

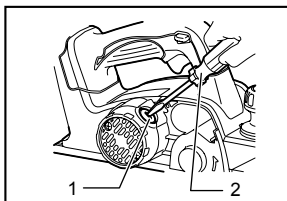
1. Chip cover  
2. Screwdriver



011753

1. Nozzle  
2. Screwdriver

Use a screwdriver to remove the chip cover or nozzle.



011750

1. Brush holder cap  
2. Screwdriver

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized Service Centers, always using Makita replacement parts.

## OPTIONAL ACCESSORIES

### ⚠CAUTION:

- These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- High-speed steel Planer blade
- Tungsten-carbide Planer blade (For longer blade life)
- Mini planer blade
- Sharpening holder assembly
- Blade gauge
- Set plate set
- Edge fence (Guide rule)
- Extension guide set
- Dressing stone
- Nozzle
- Dust bag assembly
- Elbow
- Socket wrench
- Plastic carrying case
- Various type of Makita genuine batteries and chargers

### NOTE:

- Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

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